without markings, the head pale luteous, clypeus dark brown, the mandibles, a spot on each side of clypeus, and antennæ also brown. The feet are very short, those of joints 7 to 10 represented by complete, rather broad ellipses of crochets, the last pair by a line of crochets. Spiracles black-ringed. Tubercles very minute, iv and v approximated substigmatally on a common chitinized but colorless area, normal. Skin smooth, the segments triannulate, distinctly so.

Genus ACALLIS Ragonot.

Acallis griphalis Hulst.

I have two males from Fort Collins, Colorado (C. P. Gillette), numbered 2573 Agr. College. Also a female specimen from Williams, Arizona, July 10 (H. S. Barber) which is much larger than the males and has the outer line farther from the margin.

Genus PARACHMA Walker.

Parachma ochracealis Walker.

I have specimens from Huachuca Mts. and Santa Rita Mts., Arizona (Dr. Barnes). (See remark under *Arta statalis*, p. 94.)

Genus CONDYLOLOMIA Grote.

Condylolomia participalis Grote.

I have specimens from Cohasset, Mass. (O. Bryant), New Brighton, Pa. (F. A. Merrick), Pittsburgh, Pa. (H. Engel), and Plummers Island, Maryland (A. Busck).

A REVIEW OF THE NORTH AMERICAN PYRALINÆ.*

[Lepidoptera, Pyralidæ.]

By Harrison G. Dyar.

Having had occasion to transfer the moths of this subfamily to new drawers in anticipation of moving the National Museum collection to the new building, I used the opportunity to rearrange them and determine the unnamed specimens. The subfamily is represented by but few species in our region, falling into six genera, separable as follows:

* Published by permission of the Secretary of the Smithsonian Institution.

KEY TO THE GENERA OF NORTH AMERICAN PYRALINÆ.

Median vein of hind wing without pecten of hairs on the upper side; maxillary palpi filiform.

Palpi with the second and third joints upturned.

Proboscis well developed.

Genus AGLOSSA Latreille.

Aglossa cuprealis Hübner.

The species ranges from Maryland southward in the United States. The specimens before me agree well with European ones.

Lloyds, Md., July 10, 1907 (H. S. Barber); Plummers Island, Maryland, June 3 (A. Busck); District of Columbia, July 2, 1888 (T. Pergande); Pittsburg, Pa., June 8 and 18, 1906 (H. Engel); New Brighton, Pa., July 8, 1902 (H. D. Merrick); "corn Pyralis, Treat;" Raleigh, N. C., June 28, 1907 (H. S. Brimley); Eufaula, Ala. (C. V. Riley).

Aglossa cuprina Zeller.

Sir Geo. Hampson places this species in *Pyralis*, but my specimens have the tongue aborted. Possibly Sir George has made a different identification. If I am correct the species is easily to be told from *cuprealis* by the strong exsertion of the inner line on submedian fold, which contains an elliptical dark patch, looking like an elongated replica of the discal mark.

Center Harbor, N. H. August 3, 1902 (H. G. Dyar); Plummers Island, Md., June 5 to July 10 (Schwarz, Barber, Busck); Pittsburg, Pa., July 11, 1905 (H. Engel); Rhinebeck, N. Y., August 3, 1890 (H. G. Dyar); Tryon, N. C., August 2, 1903 (W. F. Fiske); "416L" (C. V. Riley); St. Louis, Mo., September 8, 1904 (H. McElhose); Texas, July 7 (Belfrage). The last specimen was submitted to Ragonot in 1884, who identified it as *Aglossa cuprealis*, but wrongly, in my opinion.

Aglossa acallalis, n. sp.

A small, frail species with very long fringes; reddish, powdered with black as in cuprina Zell., the lines blackish, broad, edged with pale

yellowish, both mesially excurved and feebly dentate, but smooth and even in comparison with the lines of the other species; fringes silky gray. Hind wing pale grayish, with a darker irregular mesial line far removed from the margin. Expanse, 16 to 20 mm.

Three specimens, Williams, Arizona, July 9 and 19 (H. S. Barber); Ashfork, Arizona, June 18 (H. S. Barber). Type.—No. 11924, U. S. National Museum.

Genus PYRALIS Linnæus.

Pyralis farinalis Linnæus.

Distributed throughout the United States.

Pyralis costiferalis Walker.

I have three specimens that agree well with Walker's description.

New Brighton, Pa., July 2, 1905 (H. D. Merrick); Pittsburg, Pa., June 23, 1905 (H. Engel); ——— (C. V. Riley).

Pyralis disciferalis, n. sp.

Fore wing reddish ocherous, irrorate with blackish; costal edge blackish except where cut by the lines; discal spot large, blackish, subquadrate; lines ocherous, slightly intensified on the costa, strongly edged toward the median space with blackish, the inner slightly angled on median vein and produced inward on submedian fold, the outer mesially excurved, obscurely dentate; a row of black points at the base of the fringe. Hind wing ocherous, reddish shaded, usually with an extra mesial dark line and row of dots in the fringe. Expanse, 16 to 23 mm.

Twenty-four specimens, Plummers Island, Maryland, June 5 to August 18 (Schwarz, Busck, Barber, Warner); Pittsburg, Pa., July 20, 1906 (H. Engel); New Brighton, Pa., June 20, 1902 (H. D. Merrick); Chicago, Ill. (A. Kwiat); Travilah, Md. (F. C. Pratt); Black Jack Springs, Texas (W. Barnes); Kerrville, Texas, May, 1900 (H. Lacy); Somerville, S. C., April (R. Ottolengui).

Type.—No. 11925, U. S. National Museum.

Allied to P. costiferalis Walk., but the costal markings are not more developed than the cross-lines. Especially the basal costal mark does not exceed the subcostal vein, whereas in costiferalis it extends to the median vein.

A specimen was sent to Prof. C. H. Fernald in 1901, but still remains with him unidentified. I venture to enforce the statute of limitations on a seven years basis and identify the

species myself.

Pyralis electalis Hulst.

Ariz. (Aglossa n. sp.? Ragonot, 1884; still undescribed, acc. to Rag. '86); Santa Rita Mts., Ariz., June 11, 1898 (E. A. Schwarz); Huachuca Mts., Arizona (Wm. Barnes); Las Vegas Hot Springs, New Mexico (Schwarz & Barber); southern Utah, July, 1900 (O. C. Poling).

Pyralis manihotalis Guenée.

Pyralis manihotalis Guenée, Spec. Gen. Lep., VIII, p. 121, 1854.— Cayenne [French Guiana].

Pyralis vetusalis Walker, Cat. Brit. Mus., XIX, p. 891, 1859.—Santo Domingo.

Pyralis gerontesalis Walker, Cat. Brit. Mus., XIX, p. 896, 1859.— Ceylon.

Sacatia laudatella Walker, Cat. Brit. Mus., xxvII, p. 124, 1863.—Ceylon.

Pyralis despectalis Walker, Cat. Brit. Mus., XXXIV, p. 1243, 1865.— Moreton Bay [Australia].

Pyralis? miseralis Walker, Cat. Brit. Mus., XXXVII, p. 1244, 1865.—
Moreton Bay.

Pyralis achatina Butler, Ent. Mo. Mag., xiv, p. 49, 1877.—Hawaiian Islands.

Pyralis manihotalis Hampson, Trans. Ent. Soc. Lond., 1896, p. 509.— Neotropical, Oriental, and Australian regions.

This species was not included in Bulletin 52, U. S. National Museum, so I give the synonymy in full, after Hampson. I have before me 4 specimens taken at Miami, Florida, by Mr. Schaus and named by him at the British Museum.

Genus HYPSOPYGIA Hübner.

Hypsopygia costalis Fabricius.

Atlantic States and Mississippi Valley from Wisconsin to Texas.

Genus HERCULIA Walker.

Herculia planalis Grote.

This species was described from Colorado. I have two specimens before me from Kerrville, Texas, May, 1906, and May, 1907 (H. Lacy).

Herculia intermedialis Walker.

Hampton, N. H., July 29, 1905 (S. A. Shaw); Plainfield, N. J. (Mrs. F. O. Herring); Chicago, Ill. (A. Kwiat); New

Brighton, Pa., July 1, 1905 (H. D. Merrick); Plummers Island, Maryland, June 5, 19 (Schwarz, Busck); Tryon, N. C., May 13, 1903 (W. F. Fiske).

Herculia phœzalis, n. sp.

Dark brown with a vinous tint, fringes concolorous; lines blackish toward the median space, edged with yellowish outwardly, the inner angled on median vein, the outer more distinct on costa, evenly excurved mesially; a row of terminal blackish dashes nearly forming a line. Hind wing with less vinous tint than the fore wing, but equally dark, crossed by a curved whitish extra-mesial line, well removed from the margin; fringe as on fore wing, with a black central line. Beneath grayish, the terminal space paler and vinous shaded, the outer common line repeated, dark, edged with pale, emphasized on the costa of fore wing; a row of terminal triangular blackish dots. Expanse, 17 to 25 mm.

Thirteen specimens, Los Angeles Co., Cal., May (A. Koebele); Los Angeles Co., Cal. (D. W. Coquillett); Santa Monica, Cal. (J. J. Rivers).

Type.—No. 11927, U. S. National Museum.

Mr. Koebele's specimens are labelled "old branches of *Cupressus* and fresh bark of orange;" Mr. Coquillett's bear the letter "G," presumably referring to breeding notes.

A specimen of this species was sent to Prof. C. H. Fernald in 1898, with permission to describe it, if new. He has never reported on it, nor returned the specimen, and I trust he will forgive me for taking the matter into my own hands after the lapse of ten years.

Herculia cohortalis Grote.

This species is not before me. Described from Colorado and apparently allied to the following.

Herculia thymetusalis Walker.

I have but a single specimen of this species, from the Adirondack Mts., N. Y. (W. W. Hill).

Herculia binodulalis Zeller.

I have identified as this species two specimens from Kerrville, Texas, November, 1906 (H. Lacy).

Herculia infimbrialis, n. sp.

Pale stramineous-ochraceous, the costa of fore wings darker, the fringe concolorous, not yellow. The lines start from triangular yellow costal blotches, and appear dark, their narrow vinous-brown edges

being well relieved, the pale lines themselves scarcely distinguishable from the ground color. Hind wing with two approximated dark lines. Expanse, 27 mm.

Two females, Glenwood Springs, Colorado, July 16–23 (Wm. Barnes); Clear Creek, Col., July 18, 1904 (E. J. Oslar). *Type.*—No. 11928, U. S. National Museum.

Near to binodulalis, but distinguished by the dark lines on

both wings.

Herculia himonialis Zeller.

I think this is not more than a variety of *olinalis* Guen.; the position of the lines on the hind wing seems to vary.

My specimens are mostly from Texas and Colorado, though

some from the Atlantic Coast region agree very well.

Herculia olinalis Guenée.

Common in the Atlantic Coast region from Rhode Island to Texas, westward to the Mississippi valley. I have a specimen from Las Vegas Hot Springs, New Mexico (H. S. Barber) that seems referable here rather than to *himonialis*, although somewhat intermediate in the position of the lines.

Genus OMPHALOCERA Lederer.

Omphalocera cariosa Lederer.

I have specimens from Maryland, North Carolina, and Alabama, the larvæ on pawpaw; the range probably extends throughout the Mississippi Valley. The larva is black with many white dots, a broad dull red dorsal and lateral stripe, the former expanded on the centers of the segments.

Omphalocera dentosa Grote.

New Haven, Conn. (A. H. Verrill); Plummers Island, Maryland, June 6, 1902 (H. S. Barber); Ames, Iowa, June 6, 1896 (C. P. Gillette); Black Jack Springs, Texas (Wm. Barnes); Dallas, Texas, May 31, 1896 (Dept. Agr. no. 6351), larvæ on Berberis. I have also a female from Durango, Colorado, that is less vinous in tone and more darkly colored, perhaps a distinct species, but with the present material I do not venture to separate it.

Larvæ received from Mr. A. H. Verrill, which I think belong to this species, are black with many white dots, without

the red lines of cariosa.

Genus USCODYS, n. gen.

Median vein of the hind wings weakly pectinate on the upper side; maxillary palpi broadly triangularly scaled; labial palpi long, porrect,

drooping, the second joint with long scales below; tongue rudimentary. Fore wing with veins 2 to 4 separate, 6 from near the upper angle of the cell, 7 to 9 stalked, 10 and 11 from the cell, free. Hind wing with the cell long, 2 to 5 separate, 6 and 7 from upper angle of the cell, 8 running close to 7 but not anastomosing.

Type.—Anerastia cestalis Hulst (lately referred to Aglossa). According to Sir G. F. Hampson's table, this genus would fall in the Crambinæ, but I have given more weight to the venation than to the hair-pecten of the hind wing and scaling of the maxillary palpi, which I think are more superficial characters, and accordingly place the genus in the Pyralinæ.

Uscodys cestalis Hulst.

Oracle, Arizona, July 11 (E. A. Schwarz); Tucson, Arizona, June 22 (E. A. Schwarz); Ariz., sent to Lord Walsingham and labelled by him "Pyralidina" 4747 Wlsm. 1906.

Uscodys atalis, n. sp.

Similar to *cestalis* Hulst, the markings of the fore wing being practically identical. The species is smaller, the color of the fore wings brighter gray without a brown tint, the abdomen and hind wings whitish scaled, not fuscous, the hind wing powdered with gray outwardly and with a blackish terminal line. Expanse, 20 to 22 mm.

Nineteen specimens, Yuma Co., Ariz., desert, March 26, April 10 (W. D. Kearfott); southern Arizona, May 15–30 (O. C. Poling); Yavapai Co., Ariz.; Walters Station, Cal., April 1; Sapelo Canyon, New Mexico, July 27, 1902 (E. J. Oslar); Gallinas Canyon, New Mexico (E. J. Oslar).

Type.—No. 11929, U. S. National Museum.

The specimens have all come through the kindness of Mr. Kearfott. His various attempts to name the species are attested by a number of labels, which bear witness to the aberrant character of this confusing species. One label reads "close to Salebria, probably new," another "talis? probably," this last attributed to Professor Fernald and presumably referring to Grote's "bright purple" Botis talis from Alabama, through what confusion it would be hard to say.